

Table 1. Studies Included in the Systematic Review ^a							
	n	Experiment Number ^b	Study Design	Sample	Psychedelic	Drug Comparator	Non-Drug Comparator
Holze et al (2020) ²⁶	28	1	Double-blind within-subjects crossover	Healthy volunteers	LSD	Placebo, MDMA, and D-amphetamine	
Holze et al (2019) ²⁷							
Wittmann et al (2007) ²⁸	12		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and different doses of psilocybin	
Wackermann et al (2008) ²⁹							
Preller et al (2017) ³⁰	25		Double-blind within-subjects crossover	Healthy volunteers	LSD	Pretreatment with ketanserin. Treatment compared with placebo	
Kraehenmann et al (2017) ³¹							
Kraehenmann et al (2017) ³²							
Preller et al (2018) ³³							
Preller et al (2018) ³⁴							
Barrett et al (2018) ³⁵							
Preller et al (2019) ³⁶							
Pokorny et al (2020) ³⁷							
Jaffe et al (1972) ³⁸	7		Double-blind between-subjects	Healthy psychotherapy patients	LSD	Placebo, dextroamphetamine	
Jaffe et al (1973) ³⁹							
Dahlberg and Jaffe (1979) ⁴⁰							
Natale et al (1979) ⁴¹							
Mueller et al (2017) ⁴²	24		Double-blind within-subjects crossover	Healthy volunteers	LSD	Placebo	
Dolder et al (2016) ⁴³		1					
Liechti et al (2017) ⁴⁴		1					
Dolder et al (2017) ⁴⁵							
Müller et al (2017) ⁴⁶							
Müller et al (2018) ⁴⁷							
Schmidt et al (2018) ⁴⁸							
Schmid et al (2015) ⁴⁹	16		Double-blind within-subjects crossover	Healthy volunteers	LSD	Placebo	
Dolder et al (2016) ⁴³		2					
Strajhar et al (2016) ⁵⁰							
Liechti et al (2017) ⁴⁴		2					
Schmid and Liechti (2018) ⁵¹							
Strassman and Qualls (1994) ⁵²	12		Double-blind within-subjects crossover	Experienced hallucinogen users	DMT	Saline placebo and different doses of DMT	
Strassman et al (1994) ⁵³							
Riba et al (2003) ⁵⁴	18		Double-blind within-subjects crossover	Experienced psychedelics users	DMT	Placebo, and different doses of ayahuasca	
Riba, Anderer, et al (2002) ⁵⁵							
Riba et al (2002) ⁵⁶							
Ludwig and Levine (1965) ⁵⁷	70		Single-blind between subjects	“Post-narcotic drug addict inpatients”	LSD		Hypnosis; psychotherapy; hypnosis + psychotherapy with or without drug
Levine and Ludwig (1965) ⁵⁸							
Palhano-Fontes et al (2019) ⁵⁹	30		Double-blind between subjects	Treatment-resistant depression	Ayahuasca	Liquid mixture including zinc to produce gastrointestinal distress, designed to look and taste like ayahuasca	
Zeifman et al (2019) ⁶⁰							
Galvão et al (2018) ⁶¹	71		Double-blind between subjects	Treatment-resistant depression and healthy controls	Ayahuasca	Placebo	
Almeida et al (2019) ⁶²							
Smigielski, Kometer, et al (2019) ⁶³	40		Double-blind between subjects	Buddhist meditators	Psilocybin	Placebo	
Smigielski, Scheidegger, et al (2019) ⁶⁴							
Yanakieva et al (2019) ⁶⁵	48		Double-blind between subjects	Healthy volunteers	LSD	Placebo and different doses of LSD	
Family et al (2020) ⁶⁶							
Kometer et al (2012) ⁶⁷	17		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and ketanserin pretreatment	
Kometer et al (2013) ⁶⁸		1					
Kometer et al (2015) ⁶⁹							
Pokorny et al (2016) ⁷⁰	40		Double-blind between subjects with within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and pretreatment with ergotamine and buspirone	
Kometer et al (2015) ⁶⁹		2					
Kometer et al (2015) ⁶⁹		3					
Griffiths et al (2011) ⁷¹	18		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and different doses of psilocybin	
Johnson et al (2012) ⁷²							
Gouzoulis-Mayfrank et al (2005) ⁷³	15		Double-blind within-subjects crossover	Healthy volunteers	DMT	Different doses of DMT vs 5-ketamine	
Gouzoulis-Mayfrank et al (2006) ⁷⁴							
Heekeren et al (2007) ⁷⁵							
Heekeren et al (2008) ⁷⁶							
Gouzoulis-Mayfrank et al (1999) ⁷⁷	32		Double-blind between-subjects	Healthy volunteers	Psilocybin	MDE, methamphetamine, placebo	
Gouzoulis-Mayfrank et al (1998) ⁷⁸							
Gouzoulis-Mayfrank et al (1999) ⁷⁹							
Gouzoulis-Mayfrank et al (2002) ⁸⁰							
Kraehenmann et al (2015) ⁸¹	25		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Grimm et al (2018) ⁸²							
Daumann et al (2008) ⁸³	14		Double-blind within-subjects crossover	Healthy volunteers	DMT	5-ketamine and placebo	
Daumann et al (2010) ⁸⁴							
Carbonaro et al (2018) ⁸⁵	21		double-blind within-subjects crossover	Healthy volunteers	Psilocybin	DXM, placebo, different doses of psilocybin	
Barrett et al (2018) ⁸⁶							
Bershad et al (2019) ⁸⁷	20		Double-blind within-subjects crossover	Healthy volunteers	LSD	Placebo and different doses of LSD	
Bershad et al (2020) ⁸⁸							
Natale et al (1978) ⁸⁹	3		Double-blind within-subjects crossover	“Neurotic depressed” psychoanalytic outpatients	LSD	Dextroamphetamine 15 mg, placebo	
Hollister et al (1962) ²⁵	4	1	Single-blind within-subjects crossover	Psychotherapy patients	Psilocybin	Placebo and different doses of psilocybin	
Hollister et al (1962) ²⁵	18	2	Single-blind within-subjects crossover	Psychotherapy patients	Mescaline, psilocybin, and LSD	Mescaline, psilocybin, and LSD	
Rosenberg et al (1964) ⁹⁰	6		Single-blind within-subjects crossover	Incarcerated former opiate addicts	DMT and 6-HDMT	Placebo; 6-HDMT	
Vollenweider et al (1999) ⁹¹	7		Single-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Netz et al (1963) ⁹²	8		Single-blind within-subjects crossover	Healthy volunteers	LSD	Placebo	
Dolezal and Hausner (1968) ⁹³	8		Double-blind within-subjects crossover	“Neurotic inpatients”	LSD	Benactyzine 25 mg; phenmetrazine 10 mg SQ	
Hasler et al (2004) ⁹⁴	8		Double-blind within-subjects crossover	Healthy volunteers (university and hospital staff)	Psilocybin	Placebo and different doses of psilocybin	
Carter et al (2005) ⁹⁵	8		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and ketanserin	
Moreno (2006) ⁹⁶	9		Double-blind within-subjects crossover	Obsessive-compulsive disorder	Psilocybin	Different doses of psilocybin	
dos Santos et al (2007) ⁹⁷	9		Double-blind between-subjects with within-subjects crossover	Experienced long-term ayahuasca users	Ayahuasca	Placebo	
Vollenweider et al (1998) ²⁴	10	1	Single-blind between-subjects with within-subjects crossover	Healthy volunteers	Psilocybin	Pretreatment with ketanserin, haloperidol, risperidone or placebo. Treatment compared with placebo	
Vollenweider et al (1998) ²⁴	15	2	Single-blind between-subjects with within-subjects crossover	Healthy volunteers	Psilocybin	Pretreatment with ketanserin, treatment compared with placebo	
Dos Santos et al (2011) ⁹⁸	10		Double-blind within-subjects crossover	Healthy volunteers	Ayahuasca	Placebo, d-amphetamine	
Alonso et al (2015) ⁹⁹	10		Double-blind within-subjects crossover	Healthy volunteers	Ayahuasca	Placebo	
Carter et al (2005) ¹⁰⁰	12		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and different doses of psilocybin	
Grob et al (2011) ¹⁰¹	12		Double-blind within-subjects crossover	Patients with advanced cancer and anxiety	Psilocybin	Niacin 250 mg	
Gasser et al (2014) ¹⁰²	12		Double-blind between-subjects	Patients with anxiety associated with life-threatening diseases	LSD	Low-dose LSD 20 µg	
Valle et al (2016) ¹⁰³	12		Double-blind within-subjects crossover	Healthy volunteers	Ayahuasca	Pretreatment with ketanserin. Treatment compared with placebo	
Strassman et al (1996) ¹⁰⁴	13		Double-blind within-subjects crossover	Healthy volunteers	DMT	IV saline	
Riba et al (2006) ¹⁰⁵	15		Double-blind within-subjects crossover	Experienced psychedelics users	Ayahuasca	Placebo	
Carhart-Harris et al (2012) ¹⁰⁶	15		Single-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo (IV saline)	
Vollenweider et al (2007) ¹⁰⁷	16		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and different doses of psilocybin	
Quednow et al (2012) ¹⁰⁸	16		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and ketanserin	
Kometer et al (2011) ¹⁰⁹	17		Single-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo, different doses of psilocybin	
Dos Santos et al (2012) ¹¹⁰	17		double-blind within-subjects crossover	Healthy volunteers	Ayahuasca	Placebo	
Soskin et al (1973) ¹¹¹	18		Double-blind within-subjects crossover	“Alcoholics”	DPT	Inactive placebo IM	
Umbricht et al (2003) ¹¹²	18		Single-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Riba et al (2004) ¹¹³	18		Double-blind within-subjects crossover	Experienced psychedelic users	Ayahuasca	Placebo	
Tagliazucchi et al (2016) ¹¹⁴	20		single-blind within-subjects crossover	Healthy volunteers	LSD	Placebo (IV saline)	
Speth et al (2016) ¹¹⁵	20		Single-blind within-subjects crossover	Healthy volunteers	LSD	Saline placebo IV	
Timmermann et al (2018) ¹¹⁶	20		Single-blind within-subjects crossover	Healthy volunteers	LSD	Placebo (IV saline)	
Bravermanová et al (2018) ¹¹⁷	20		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Barbanoj et al (2008) ¹¹⁸	22		Double-blind within-subjects crossover	Healthy volunteers	Ayahuasca	Placebo and d-amphetamine	
Preller et al (2020) ¹¹⁹	23		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Soskin (1973) ²¹	28		Double-blind between subjects	“Psychosomatic” and “nonpsychotic inpatients”	LSD	Chlordiazepoxide 25 mg and methylphenidate 25 mg	
Ross et al (2016) ⁵	29		Double-blind between subjects with within-subjects crossover	Anxiety and depression in cancer	Psilocybin	Niacin 250 mg (active placebo)	
Preller et al (2016) ¹²⁰	29		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Smart et al (1966) ¹²¹	30		double-blind between-subjects	“Alcoholics”	LSD	Ephedrine 60 mg	Psychosocial treatment as usual
Bernasconi et al (2014) ¹²²	30		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Zegans (1967) ¹²³	31		Single-blind between subjects	Healthy volunteers	LSD	Placebo	
Wikler et al (1965) ¹²⁴	33		Single-blind within-subjects crossover	“Postaddicts”	LSD	Placebo IM, morphine IM, pentobarbital IM, amphetamine IM	No treatment control groups of (1) research staff and (2) patients with schizophrenia
Pokorny et al (2017) ¹²⁵	33		Double-blind within-subjects crossover	Healthy volunteers	Psilocybin	Placebo	
Middlefell (1967) ¹²⁶	36		Single-blind within-subjects crossover	“Psychiatric inpatients”	LSD	Sterile water injection placebo	No intervention
Griffiths et al (2006) ¹²⁷	36		Double-blind between subjects with within-subjects crossover	Healthy volunteers	Psilocybin	Methylphenidate	Volunteers were randomly assigned to receive either 2 sessions (random assignment) or 3 sessions (methylphenidate first 2 sessions and unblinded psilocybin on the third, these participants were not included in statistical analysis) to further obscure the study design
Schmidt et al (2013) ¹²⁸	42		Double-blind between subjects with within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and ketamine	
Bowen et al (1970) ¹⁷	44	2	Double-blind between subjects	“Inpatient alcoholics”	LSD	Low-dose LSD (25 µg)	
Pasquini et al (2020) ¹²⁹	50		Single-blind between subjects	Healthy volunteers	Ayahuasca	Placebo	
Denson and Sydiaha (1970) ¹³⁰	51		Unblinded between subjects	“Alcoholic” and “neurotic” patients	LSD	0	Waitlist control
Hollister et al (1969) ¹³¹	52		Double-blind between subjects	“Alcoholic inpatients”	LSD	Dextroamphetamine 60 mg	
Griffiths et al (2016) ⁴	56		Double-blind between subjects with within-subjects crossover	Life-threatening cancer diagnosis and DSM-IV diagnosis that included anxiety or depression symptoms	Psilocybin	Low-dose psilocybin	
Lewis et al (2017) ¹³²	58		Double-blind between subjects with within-subjects crossover	Healthy volunteers	Psilocybin	Placebo and different doses of psilocybin	
Mason et al (2020) ¹³³	60		Double-blind between subjects	Healthy volunteers	Psilocybin	Placebo	
Savage and McCabe (1973) ¹³⁴	78		Unblinded between subjects	“Paroled narcotic addicts”	LSD		Outpatient addiction program without LSD
Griffith="							

^aEmpty rows with gray cells entail the data in the article were derived from a parent study, which can be found in the first full row above the empty row. The language for the patient sample was taken directly from the articles themselves, without attempting to fit the language into modern nosologic categories. Quotes are used in several instances (eg, “alcoholics”) because we are using the terms from the source but recognize some such terms may be considered stigmatizing in the present day.

^bFor articles that reported on more than one study, *experiment number* refers to different studies (experiments) within that article.

Abbreviations: 6-HDMT = 5-hydroxy-DMT, DMT = *N,N*-dimethyltryptamine, DPT = *N,N*-dipropyltryptamine, DXM = dextrometorphan, IM = intramuscular, IV = intravenous, LSD = lysergic acid diethylamide, MDE = 3,4-methylenedioxyethylamphetamine, MDMA = 3,4-methylenedioxymethamphetamine, SQ = subcutaneous.